

## TECHNOLOGY SERVICES

PROGRAM:		PROGRAM ELEMENT:				
Desktop Computer Modernization (DCM)						
PROGRAM MISSION:						
To provide up-to-date desktop PCs and software and improved levels of service (acquisition, management, Help Desk, and maintenance) to all departments at lower cost						
COMMUNITY OUTCOMES SUPPORTED:						
<ul style="list-style-type: none"><li>• Enable County employees to be the best at serving their customers</li><li>• Deliver information and services to citizens at work, at home, and in the community</li><li>• Increase the productivity of government</li></ul>						
PROGRAM MEASURES		FY02 ACTUAL	FY03 ACTUAL	FY04 ACTUAL	FY05 BUDGET	FY06 CE REC
Outcomes/Results:						
Average cost saving per PC purchased via DCM (\$)	321	316	280	300	300	
Average age of PCs (years)	2.1	2.3	3.0	2.5	2.4	
Service Quality:						
Average Help Desk wait time (seconds)	7.5	6.3	2.3	<sup>b</sup> 90	<sup>b</sup> 90	
Percentage of Help Desk calls resolved during initial call	96	96	95	80	80	
Average time to repair a PC (hours)	4.3	3.8	2.1	<sup>c</sup> 8.0	<sup>c</sup> 8.0	
Efficiency:						
Cost per PC covered under services (\$) <sup>d</sup>	410	410	410	431	368	
Cost per service call (including installations) (\$)	205	147	134	148	135	
Workload/Outputs:						
PCs replaced	257	1,804	115	2,250	2,000	
PCs covered under services	6,383	6,853	6,947	7,800	7,900	
Service calls performed (including installations) <sup>a</sup>	13,389	20,329	22,868	22,000	24,000	
Inputs:						
Expenditures - purchases (\$000)	1,110	2,345	531	2,860	2,962	
Expenditures - services (\$000)	2,751	2,988	3,066	3,259	3,234	
Expenditures - management (\$000)	<u>520</u>	<u>717</u>	<u>634</u>	<u>674</u>	<u>661</u>	
TOTAL expenditures (\$000) <sup>e</sup>	4,381	6,050	4,231	6,793	6,857	
Workyears <sup>e</sup>	7.0	7.0	7.0	7.0	7.0	
Notes:						
<sup>a</sup> The number of service calls performed has continued to increase over the years as more and more departments utilize the PC Help Desk.						
<sup>b</sup> 90 seconds is the contractual level of service; the actual results have been well below the contractual requirement.						
<sup>c</sup> Eight hours is the contract level of service; the actual results have been well below the contractual requirement.						
<sup>d</sup> The cost per PC covered under services is a fixed contracted amount per PC, with some variability depending on the type and quality of service.						
<sup>e</sup> From FY02 through FY04, DCM program expenditures and staff have consisted of two contractors and five in-house positions from the Enterprise Services Program. In FY05, one contractor will be converted to a County merit position. Thus, the expenditures and workyears for FY05 and FY06 include one contractor and six in-house positions from the Enterprise Services Program.						
EXPLANATION:						
The Desktop Computer Modernization (DCM) program was developed by Montgomery County's Department of Technology Services based on a best practices approach to maintaining a modern, cost-effective desktop computing environment in the County. The program, which began in FY99, is designed to lower the total cost of ownership through standardization, asset management, Help Desk support, and maintenance services. The DCM program includes centralized management and maintenance of the County's installed base of nearly 7,000 desktop and laptop computers (as of FY04) and annual replacement for one-fourth of those PCs. The program is designed to improve the efficiency and effectiveness of County employees by ensuring that they have the appropriate, state-of-the-art computing resources they need to do their job. County DCM staff are responsible for planning, coordination, and quality assurance, and for coordinating and monitoring PC installation, moves, adds, changes, the Help Desk, and maintenance services provided by a contractor.						
PROGRAM PARTNERS IN SUPPORT OF OUTCOMES: Office of Human Resources (training), user departments (planning, implementation).						
MAJOR RELATED PLANS AND GUIDELINES: Horizon 21 Information Technology Strategic Plan: 1998, 1999; Telecommunications Audit Action Plan, 1998; DCM Program Best Practices and Financial Analysis, 1997.						

## TECHNOLOGY SERVICES

**PROGRAM:**

Geographic Information Systems

**PROGRAM ELEMENT:**

Custom Maps and Data Reports Generation

**PROGRAM MISSION:**

To provide timely and accurate maps and data reports that enable informed decision-making on geographically-based issues by customer departments

**COMMUNITY OUTCOMES SUPPORTED:**

- Enable County employees to be the best at serving their customers
- Deliver information and services to citizens at work, at home, and in the community
- Increase the productivity of government

**PROGRAM MEASURES**

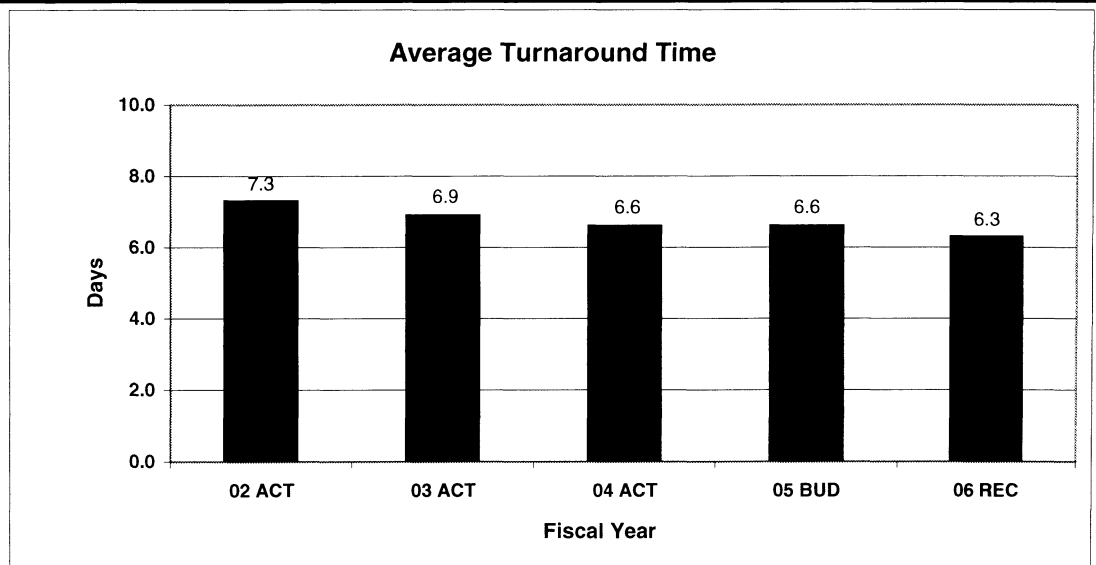
	FY02 ACTUAL	FY03 ACTUAL	FY04 ACTUAL	FY05 BUDGET	FY06 CE REC
<b>Outcomes/Results:</b>					
Cost avoidance for land surveys - Department of Public Works and Transportation (\$000)	235	250	248	250	250
Cost savings on election maps - Board of Elections (\$000)	35	35	34	35	35
Cost savings on State's Attorney maps (\$000)	15	15	14	15	15
<b>Service Quality:</b>					
Average turnaround time for production of customized maps (days)	7.3	6.9	6.6	6.6	6.3
<b>Efficiency:</b>					
Average cost per map (\$)	90	85	106	106	104
<b>Workload/Outputs:</b>					
Number of custom maps provided	1,450	1,604	1,405	1,500	1,680
Number of database layers updated	8	8	9	9	10
<b>Inputs:</b>					
Workyears <sup>a</sup>	2.4	2.3	2.3	2.3	2.3
Expenditures - personnel (\$000)	131	137	149	159	174

**Notes:**

<sup>a</sup>Workyears relate to staff time spent on the generation of custom maps.

**EXPLANATION:**

The County government has made increasing use of customized Geographic Information System (GIS) maps. While the average cost per map climbed nearly 18% between FY02 and FY04, the turnaround time decreased by almost 10%.



**PROGRAM PARTNERS IN SUPPORT OF OUTCOMES:** Maryland-National Capital Park and Planning Commission, Washington Suburban Sanitary Commission, Montgomery County Public Schools, Department of Public Works and Transportation, Department of Permitting Services, user departments and agencies, cities of Gaithersburg and Rockville, Metropolitan Washington Council of Governments.

**MAJOR RELATED PLANS AND GUIDELINES:** Horizon 21 Information Technology Strategic Plan, July 1998, 1999; Montgomery County GIS Plan, June 1996.

## TECHNOLOGY SERVICES

<b>PROGRAM:</b> Radio Communications		<b>PROGRAM ELEMENT:</b> Radio Maintenance			
<b>PROGRAM MISSION:</b> To provide timely and reliable communications (radio) maintenance to the Police Department, Fire and Rescue Service, Department of Homeland Security, Department of Public Works and Transportation, other departments and agencies as designated, and to the County Executive and County Council					
<b>COMMUNITY OUTCOMES SUPPORTED:</b> <ul style="list-style-type: none"><li>• Enable County employees to be the best at serving their customers</li><li>• Deliver information and services to citizens at work, at home, and in the community</li><li>• Increase the productivity of government</li></ul>					
<b>PROGRAM MEASURES</b>	<b>FY02 ACTUAL</b>	<b>FY03 ACTUAL</b>	<b>FY04 ACTUAL</b>	<b>FY05 BUDGET</b>	<b>FY06 CE REC</b>
<b>Outcomes/Results:</b>					
Percentage of services rendered without requiring a revisit	99.6	99.9	96.0	95.0	99.9
Percentage availability of radio systems infrastructure	99.9	100.0	100.0	100.0	100.0
<b>Service Quality:</b>					
Percentage of customers satisfied with Communications Maintenance Services	99.7	99.7	99.7	99.9	99.9
Average repair wait time for in-shop while-you-wait service (minutes)	50	47	50	45	45
Average turn-around time for in-shop bench service (minutes)	62	41	40	30	40
Average turn-around time for depot repair service (days)	14.1	<sup>a</sup> 27.2	14.0	14.0	14.0
<b>Efficiency:</b>					
Service requests fulfilled per workyear	374	248	202	146	164
<b>Workload/Outputs:</b>					
Number of mobile radios installed in County vehicles	1,650	1,650	1,650	1,900	1,703
Number of service requests fulfilled	3,426	<sup>b</sup> 2,277	1,660	1,340	1,512
Number of portable radios in active service	1,856	2,061	1,952	2,610	2,054
<b>Inputs:</b>					
Expenditures - workyears (\$000)	592	702	623	765	781
Expenditures - operations and capital outlay (\$000)	<u>950</u>	<u>668</u>	<sup>c</sup> <u>1,416</u>	<u>2,073</u>	<u>2,076</u>
Total expenditures (\$000)	1,542	<sup>b</sup> 1,370	2,039	2,838	2,857
Workyears <sup>c</sup>	9.2	9.2	<sup>d</sup> 8.2	9.2	9.2
<b>Notes:</b> <sup>a</sup> The FY03 actual turn-around time for depot repair service was longer than expected because of contractor transition (the existing contract expired, but the new contract was not yet in place). During the transition, in-house staff and various vendors were used for repair services on an ad-hoc basis. <sup>b</sup> FY03 actual expenditures were down due to the transition between the old and new radio systems - it was not cost effective to repair an old radio system which was soon to become surplus equipment. <sup>c</sup> Beginning with the FY04 budget, radio maintenance costs for the Public Safety Communications System are included. <sup>d</sup> The decrease in the FY04 actual workyears was due to the program's inability to fill two vacancies because of the position freeze in FY04.					
<b>EXPLANATION:</b> The Public Safety 2000 program had a major impact on program performance between FY01 and FY03. In FY01 and FY02, work efforts were increasingly focused on keeping existing radio equipment from dying of advanced age and from decreased support and replacement spending by user departments. Some radios were abandoned without replacement. In FY03, warranty considerations, equipment changeover, and training issues had major impacts on program performance. Since completion of the implementation of the 800 Mhz radio system, there has been a continued need to maintain the eleven 800 Mhz sites located throughout the County.					
<b>PROGRAM PARTNERS IN SUPPORT OF OUTCOMES:</b> User departments (planning, implementation).					
<b>MAJOR RELATED PLANS AND GUIDELINES:</b> Telecommunications Audit Action Plan, 1998; Communications Maintenance Section Policies and Procedures.					

# TECHNOLOGY SERVICES

**PROGRAM:**

Telecommunications Services

**PROGRAM ELEMENT:**

Desktop Telephone Services

**PROGRAM MISSION:**

To provide timely telephone and voice mail moves, adds, changes, and repairs with minimum interruption in service

**COMMUNITY OUTCOMES SUPPORTED:**

- Enable County employees to be the best at serving their customers
- Deliver information and services to citizens at work, at home, and in the community
- Increase the productivity of government

**PROGRAM MEASURES**
**Outcomes/Results:**
**Service Quality:**

Average percentage of troubles <sup>a</sup> outstanding per month	1	1	1	1	1
Average days to complete a move/add/change request	3	3	3	3	3
Average time to fix a trouble (hours)	8	8	8	8	8

**Efficiency:**

Telephone lines maintained per workyear	1,657	1,948	2,146	2,301	2,409
Voice mailboxes maintained per workyear	1,054	1,099	2,106	2,182	2,271
Troubles and work orders processed per workyear	998	333	745	813	962

**Workload/Outputs:**

Telephone lines maintained	13,255	15,582	15,234	16,430	17,104
Voice mailboxes maintained	8,433	8,791	14,953	15,582	16,123
Average telephone work orders processed per month	500	179	286	305	357
Average troubles fixed per month	165	43	155	179	212

**Inputs:**

Workyears	8.0	8.0	7.1	7.1	7.1
Expenditures (\$000) <sup>b</sup>	4,831	4,635	724	1,037	1,307

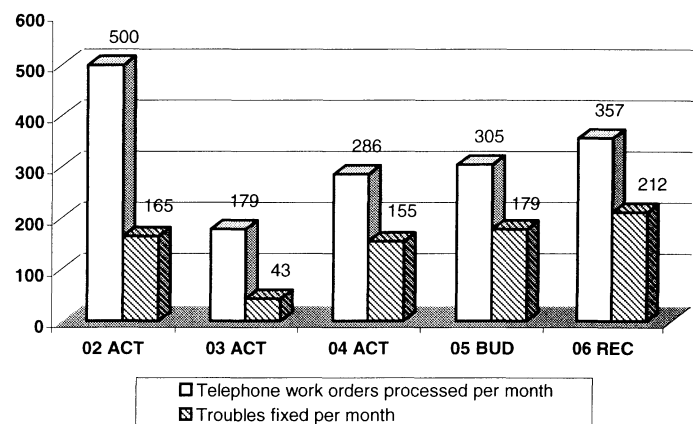
**Notes:**
<sup>a</sup>See the "Explanation" below for a definition of what constitutes a "trouble."

<sup>b</sup>The FY02 and FY03 expenditures include a Council Supplemental of \$3,934,115 for an Automatic Call Distributor for the E911 primary and secondary County communication centers. This "turnkey" system included planning, assessment, installation, design, implementation, reporting, testing, acceptance, and maintenance. The FY04 expenditures do not include the FY02 and FY03 supplemental appropriations. The FY05 budget includes a one-time expenditure of \$284,550 to migrate the Executone telephone key systems to the County's PBX platform.

**EXPLANATION:**

The graph shows the average number of telephone work orders processed and troubles repaired per month. Telephone work orders include moving, adding, or changing telephones or telephone numbers, as well as program changes in PBX software and voice mail systems. Troubles can include problems with the telephone system, jacks, building wiring, or telephone sets. The number of telephone work orders has increased due to the implementation of a new PBX on June 30, 1999, and as a result of more thorough documentation of work (for instance, every request for a change in any telephone service is now documented). Triaging of reported problems by Help Desk and customer service staff has helped to hold down the number of reported troubles needing repairs.

**Average Telephone Work Orders  
and Troubles Fixed Per Month**



**PROGRAM PARTNERS IN SUPPORT OF OUTCOMES:** Department of Technology Services IT Help Desk and Network Management; Procurement (contract management support); user departments.

**MAJOR RELATED PLANS AND GUIDELINES:** Horizon 21 Information Technology Strategic Plan, 1999; Telecommunications Audit Action Plan, 1998.